



# Federal Aviation Administration

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## Memorandum

Date: October 24, 2014

To: SEE DISTRIBUTION

From: Susan J. M. Cabler, Acting Division Manager, Design Manufacturing and Airworthiness Division, AIR-100 *SJM Cabler*

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Subject: Approved Deviation to FAA Order 8110.4C paragraph 3-3.e.(20) and Order 8130.2G paragraph 306.f.(2).

Memo No.: AIR100-14-110-DM14

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AIR-100 received from the Transport Airplane Directorate's International Branch, ANM-116, a request to deviate from Order 8110.4C, *Type Certification*, paragraph 3-3.e.(20) "to not require the eligible manufacturer serial numbers (MSNs) be listed in the Type Certificate Data Sheet (TCDS)", and from Order 8130.2G, *Airworthiness Certification of Aircraft and Related Products*, paragraph 306.f.(2) "to not require the use of the TCDS listing to determine aircraft eligibility for a standard airworthiness certificate." This request is only applicable to foreign design approval holders.

### **Background:**

Paragraph 3-3.e.(20) of Order 8110.4C requires that TCDSs include the MSNs for each aircraft under a particular model. ANM-116 believes that this is driven by the instructions to Aviation Safety Inspector (ASI) for the issuance of airworthiness certificates, specified in paragraph 306.f.(2) of Order 8130.2G, which states:

"Review records and documentation to the extent necessary to establish the following: (2) The aircraft is eligible by make, model, and serial number, using the TCDS, aircraft specification, and/or applicable aircraft listing."

ANM-116 has stated to us that all of the TCDSs that were issued for foreign manufactured transport category airplanes between 1957 and 1994 do not have the MSNs listed for the corresponding aircraft (model) as required by Order 8110.4C. Since there has been no apparent problem issuing airworthiness certificates over the years on foreign manufactured airplanes (aircraft), the ASIs apparently have not needed the TCDS MSNs listing to determine airplane (aircraft) eligibility, but instead have used other means for determining the basic eligibility of the airplane (aircraft). As a result, ANM-116 believes that listing the MSNs in each TCDS is not necessary.

**Discussion:**

As stated in the request, the listing of the MSNs in each TCDS has the following drawbacks:

- Having all MSNs published within the TCDS and to keep them up-to-date is considered impractical. Significant aircraft production rates require frequent revisions to the TCDS and it would never be up to date; and
- For some Airbus models, it is even possible to modify the aircraft post-production, e.g., thrust rating change by Service Bulletin, such that it belongs to different model group afterwards. Such information cannot be addressed in the TCDS.

**Conclusion:**

The Design, Manufacturing, and Airworthiness Division (AIR-100) is granting this deviation to all the directorates and field offices for only those cases when the foreign Civil Airworthiness Authorities (CAAs) are unable to collect the MSNs or unwilling to publish the MSNs of the foreign design approval holders' aircraft on the TCDSs.

In the next revision to Order 8130.2, we will add the following note between paragraphs 306.f.(2) and 306.f.(3):

“Note: Non-U.S. state of design aircraft manufacturers may not maintain aircraft serial numbers in their Type Certificate Data Sheet (TCDS). In this case, use the Make, Model and Variant information along with any other aircraft listing data to determine aircraft eligibility.”

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